



HYGIENETECH

Hygiene Technologies International, Inc.

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December 7, 2011

California State Board of Equalization
450 N Street
Sacramento, California 94279

Document No. 21109001.3

Attention: David Gau

Regarding: Fungal Growth Investigation and Exposure Assessment Surveys
Day Care - Plumbing Investigation

Dear Mr. Gau:

On September 30 and October 1, 2011, industrial hygienists with Hygiene Technologies International, Inc. (HygieneTech) monitored fungal growth investigation activities and conducted fungal growth exposure assessment surveys involving the Day Care facility located within the California State Board of Equalization (BOE) building. On September 30, 2011 LaCroix Davis, LLC (LCD), the industrial hygiene consultant contracted with the California Department of General Services (DGS), conducted fungal growth investigation involving the plumbing wall cavities in the Janitor closet and the hallway north of the Janitor closet.

During the surveys, air and/or surface samples were collected within the Day Care investigation enclosure and additional air sample was collected at an outdoor location on the October 1, 2011 survey date for comparison purposes. Air samples were collected using a Zefon brand Bio-Pump™ equipped with Zefon Air-O-Cell™ cassettes. Surface samples were collected on both survey dates using cellophane tape segments that were affixed to microscope slides. All such samples were subsequently analyzed for fungi (including yeasts, molds, rusts, smuts, and mushrooms) by trained and experienced microbiologists at a laboratory accredited by the American Industrial Hygiene Association (AIHA) and that successfully participates in the AIHA Environmental Microbiology Proficiency Analytical Testing (EMPAT) Program. The analytical data with supporting and background information for the samples collected on October 1, 2011 appear in the enclosed Tables 21109001-12 and 21109001-13.

During the fungal growth investigation on September 30, 2011, the lower portion of walls were removed in the Janitor closet and the adjacent northern hallway to facilitate inspection of the plumbing wall cavity interior. During the investigation, JLS Environmental Service Inc. (JLS) personnel provided the necessary control measures and upon completion of investigation activities isolated all exposed wall cavities with new gypsum board wall materials. Subsequently, JLS personnel performed detailed cleaning activities of all surfaces within the investigation enclosure that included using vacuums equipped with high efficiency particulate air (HEPA) filtration and wet wiping. Additionally, all such work was performed within a controlled negative pressure containment that was monitored with the use of a manometer. Those control measures were utilized so that dispersion of airborne spores was limited to the enclosed areas.

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The surface assessment data with supporting and background information regarding the samples collected during fungal growth investigation activities on September 30, 2011 appear in the enclosed Table 21109001-11. The results indicated fungal growth involving *Chaetomium*, colorless pores typical of *Penicillium/Aspergillus*, and/or *Stachybotrys* on various surfaces within the above mentioned investigation enclosure. Loose *Stachybotrys* spores were also detected on one of the surfaces.

As presented in Table 21109001-12, the airborne spore count datum recorded on the October 1, 2011 survey date showed mostly common fungal spore types outdoors such as *Alternaria*, basidiospores, *Bipolaris/Drechslera* group, *Chaetomium*, *Cladosporium*, *Curvularia*, *Nigrospora*, rusts, smuts, and *Torula*. In the investigation enclosure, the datum showed low airborne concentrations of *Cladosporium* and smuts. The spore types detected indoors matched those found outdoors and the overall spore count within the containment were well below the overall datum recorded outdoors. Additionally, as shown in Table 21109001-13, the surface sample data recorded within the enclosure showed no evidence of fungal growth or above-background levels of fungal spores on the building material surfaces tested. Collectively, the results of the air and surface samples collected on October 1, 2011 were considered unremarkable and notification to that effect was provided to representatives of BOE, JLS, LCD, and DGS the same day.

Be advised that the data provided in this report only represent limited fungal growth exposure potentials that existed at the time these surveys were performed and at the precise sample locations indicated, the latter of which were selected based on the available background information provided. Note that fungal growth and exposure potentials may change due to changes in environmental conditions (such as those caused by water intrusion), use of mechanical systems, or other factors. Also be advised that additional fungal growth may exist at one or more locations in the structure that were not specifically assessed during the surveys.

If you have any comments or questions regarding the information contained in this correspondence, please feel free to contact our offices directly at (310) 370-8370.

Sincerely,

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

Kenny K. Hsi, CIH
Technical Director

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A



CLIENT: California State Board of Equalization
450 N Street
Sacramento, California 94279

TABLE 21109001-11
SURFACE FUNGAL GROWTH POTENTIALS
DAY CARE
450 N STREET
SACRAMENTO, CALIFORNIA
SEPTEMBER 30, 2011

SAMPLE NUMBER	SAMPLING LOCATION	BACKGROUND DEBRIS	MISCELLANEOUS SPORES PRESENT*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
21109001-11-TL01	Day Care; Janitor closet; within containment; southern partition wall about center; approximately one inch above floor; from vertical surface of gypsum board	Heavy	Very few	4+ <i>Stachybotrys</i> species (spores, hyphae, conidiophores) 3+ <i>Chaetomium</i> species (spores, hyphae, conidiophores) <1+ Colorless spores typical of <i>Penicillium</i> / <i>Aspergillus</i> (spores, hyphae)	None	Fungal growth
21109001-11-TL02	Day Care; hallway north of Janitor closet; within containment; northern partition wall; about center; approximately one inch above floor; from reverse side of previously removed gypsum board	Heavy	Few	None	A few <i>Stachybotrys</i> spores detected.	Fungal growth in vicinity
21109001-11-TL03	Day Care; Janitor closet; within containment; southern partition wall cavity; about center; approximately two inches above floor; from reverse side of restroom northern partition wall gypsum board	Heavy	Few	3+ Colorless spores typical of <i>Penicillium</i> / <i>Aspergillus</i> (spores, hyphae)	None	Fungal growth

*Includes basidiospores (mushroom spores), myxomycetes, plant pathogens such as ascospores, rusts and smuts, and a mix of saprophytic genera with no particular spore type predominating (indicative of normal trapping).

**Quantities of fungi are graded (from least to greatest) as <1+ to 4+.

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A



CLIENT: California State Board of Equalization
450 N Street
Sacramento, California 94279

TABLE 21109001-12
AIRBORNE TOTAL FUNGI RESULTS
POST INSPECTION
DAY CARE
450 N STREET
SACRAMENTO, CALIFORNIA
OCTOBER 1, 2011

Results reported in spores per cubic meter of air (spores/M³)

SAMPLE NUMBER	21109001-12-TM01OUT	21109001-12-TM02		
SAMPLING LOCATION/ACTIVITIES	Outdoors; about 15 feet south of building; approximately five feet above ground/Normal outdoor activities	Day Care; Janitor closet and adjacent hallways; within containment; at entry door area; approximately five feet above floor/Post inspection; sampling activities only	This column intentionally left blank	This column intentionally left blank
START/STOP	14:56:00/15:01:00	15:34:00/15:39:00		
SAMPLE TIME	5 minutes	5 minutes		
Alternaria	27			
Ascospores				
Basidiospores	270			
Bipolaris/Drechslera group				
Botrytis				
Chaetomium	13			
Cladosporium	2,000	53		
Curvularia	13			
Epicoccum				
Myrothecium				
Nigrospora	13			
Oidium				
Penicillium/Aspergillus types				
Pithomyces				
Rusts	13			
Smuts, Periconia, Myxomycetes	80	13		
Stachybotrys				
Stemphylium				
Torula	80			
Ulocladium				
Zygomycetes				
Hyphal fragments	80	13		
Background debris*	2+	2+		
TOTAL**	2,500	67		

*Background debris is an indication of the amount of non-biological particulate matter present on the slide and is graded (from least to greatest) as 1+ to 4+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A



CLIENT: California State Board of Equalization
450 N Street
Sacramento, California 94279

TABLE 21109001-13
SURFACE FUNGAL GROWTH POTENTIALS
POST INSPECTION
DAY CARE
450 N STREET
SACRAMENTO, CALIFORNIA
OCTOBER 1, 2011

SAMPLE NUMBER	SAMPLING LOCATION	BACKGROUND DEBRIS	MISCELLANEOUS SPORES PRESENT*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
21109001-13- TL01	Day Care; Janitor closet and adjacent hallways; within containment; Janitor closet floor; about center; from vinyl floor tile	Light	Very few	None	None	Background
21109001-13- TL02	Day Care; Janitor closet and adjacent hallways; within containment; hallway north of Janitor closet; western end; about center; from vinyl floor tile	Light	Very few	None	None	Background

*Includes basidiospores (mushroom spores), myxomycetes, plant pathogens such as ascospores, rusts and smuts, and a mix of saprophytic genera with no particular spore type predominating (indicative of normal trapping).

**Quantities of fungi are graded (from least to greatest) as <1+ to 4+.



EMLab P&K

Report for:

Mr. Wesley Frey, Mr. Larry Sandhu
Hygiene Technologies International, Inc.: Northern California
3625 Del Amo Boulevard, Suite 180
Torrance, CA 90503-8370

Regarding: Project: 21109001-11
EML ID: 837819

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:

Direct microscopic exam (Qualitative): 10-04-2011

Service SOPs: Direct microscopic exam (Qualitative) (I100005)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Document Number: 200091 - Revision Number: 5

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wesley Frey, Mr. Larry Sandhu
Re: 21109001-11

Date of Submittal: 10-01-2011
Date of Receipt: 10-03-2011
Date of Report: 10-04-2011

DIRECT MICROSCOPIC EXAMINATION REPORT

(Wet Mount)

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 3719031-1: Tape sample 21109001-11 TL01				
Heavy	Very few	4+ <i>Stachybotrys</i> species (spores, hyphae, conidiophores) 3+ <i>Chaetomium</i> species (spores, hyphae, conidiophores) < 1+ Colorless spores typical of <i>Penicillium/Aspergillus</i> (spores, hyphae)	None	Mold growth
Lab ID-Version: 3719032-1: Tape sample 21109001-11 TL02				
Heavy	Few	None	A few <i>Stachybotrys</i> spores detected.	Mold growth in vicinity?
Lab ID-Version: 3719033-1: Tape sample 21109001-11 TL03				
Heavy	Few	3+ Colorless spores typical of <i>Penicillium/Aspergillus</i> (spores, hyphae)	None	Mold growth

* Indicative of normal conditions, i.e. seen on surfaces everywhere. Includes basidiospores (mushroom spores), myxomycetes, plant pathogens such as ascospores, rusts and smuts, and a mix of saprophytic genera with no particular spore type predominating. Distribution of spore types seen mirrors that usually seen outdoors.

† Quantities of molds seen growing are listed in the MOLD GROWTH column and are graded 1+ to 4+, with 4+ denoting the highest numbers.

†† Some comments may refer to the following: Most surfaces collect a mix of spores which are normally present in the outdoor environment. At times it is possible to note a skewing of the distribution of spore types, and also to note "marker" genera which may indicate indoor mold growth. Marker genera are those spore types which are present normally in very small numbers, but which multiply indoors when conditions are favorable for growth.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".



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Request For Analysis

Los Angeles • San Francisco • Sacramento • Fresno • Bakersfield • Ontario • San Diego
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Date of Sampling: 10-01-2011
Date of Receipt: 10-01-2011
Date of Report: 10-01-2011

Outdoor Sample: 21109001-12 TM01OUT

[illegible]

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE†			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					1	53				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores††					ND	< 13				100
Basidiospores††					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					1	13				102
Total						67	Final MoldSCORE 102			

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wesley Frey, Mr. Larry Sandhu
Re: 21109001 -12 & 13

Date of Sampling: 10-01-2011
Date of Receipt: 10-01-2011
Date of Report: 10-01-2011

MoldSCORE™: Spore Trap Report

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

†The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods.

††Most of these spore types are not seen with culturable methods (Anderson sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores.

‡Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.

Client: Hygiene Technologies International, Inc.:
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Re: 21109001 -12 & 13

Date of Sampling: 10-01-2011
Date of Receipt: 10-01-2011
Date of Report: 10-01-2011

MoldSTAT™: Supplementary Statistical Spore Trap Report**Outdoor Summary: 21109001-12 TM01OUT:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria					7 - 27 - 470	48
Ascospores					13 - 170 - 5,200	77
Basidiospores					13 - 370 - 20,000	91
Chaetomium					7 - 13 - 150	10
Cladosporium					27 - 480 - 9,800	91
Curvularia					7 - 27 - 630	18
Nigrospora					7 - 13 - 230	17
Penicillium/Aspergillus types					13 - 170 - 2,500	73
Rusts					7 - 20 - 330	20
Smuts, Periconia, Myxomycetes					7 - 40 - 910	66
Torula					7 - 13 - 170	10
Total						

The "Typical outdoor ranges" and "Freq. %" columns show the typical low, medium, and high spore counts per cubic meter and the frequency of occurrence for the given spore type. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values when the spore type is detected. For example, if the low value is 53 and the frequency of occurrence is 63%, it would mean that we typically detect the given spore type on 63 percent of all outdoor samples and, when detected, 2.5% of the time it is present in levels below 53 spores/m3.

Indoor Samples**Location: 21109001-12 TM02**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 2%	dF: N/A Result: N/A Critical value: N/A Inside Similar: N/A	Result: 0.3636	dF: 9 Result: 0.7125 Critical value: 0.5833 Outside Similar: Yes	Score: 102 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium		<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	53
Smuts, Periconia, Myxomycetes		<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	13
Total		<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	67

* The Friedman chi-square statistic is a non-parametric test that examines variation in a set of data (in this case, all indoor spore counts). The null hypothesis (H0) being tested is that there is no meaningful difference in the data for all indoor locations. The alternative hypothesis (used if the test disproves the null hypothesis) is that there is a difference between the indoor locations. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

** An agreement ratio is a simple method for assessing the similarity of two samples (in this case the indoor sample and the outdoor summary) based on the spore types present. A score of one indicates that the types detected in one location are the same as that in the other. A score of zero indicates that none of the types detected indoors are present outdoors. Typically, an agreement of 0.8 or higher is considered high.

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wesley Frey, Mr. Larry Sandhu
Re: 21109001 -12 & 13

Date of Sampling: 10-01-2011
Date of Receipt: 10-01-2011
Date of Report: 10-01-2011

MoldSTAT™: Supplementary Statistical Spore Trap Report

*** The Spearman rank correlation is a non-parametric test that examines correlation between two sets of data (in this case the indoor location and the outdoor summary). The null hypothesis (H0) being tested is that the indoor and outdoor samples are unrelated. The alternative hypothesis (used if the test disproves the null hypothesis) is that the samples are similar. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

**** MoldSCORE™ is a specialized method for examining air sampling data. It is a score between 100 and 300, with 100 indicating a greater likelihood that the airborne indoor spores originated from the outside, and 300 indicating a greater likelihood that they originated from an inside source. The Result displayed is based on the numeric score given and will be either Low, Medium, or High, indicating a low, medium, or high likelihood that the spores detected originated from an indoor source. EMLab P&K reserves the right to, and may at anytime, modify or change the MoldScore algorithm without notice.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor ranges" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. With the statistical analysis provided, as with all statistical comparisons and analyses, false-positive and false-negative results can and do occur. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the data contained in, or any actions taken or omitted in reliance upon, this report.

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wesley Frey, Mr. Larry Sandhu
Re: 21109001 -12 & 13

Date of Sampling: 10-01-2011
Date of Receipt: 10-01-2011
Date of Report: 10-01-2011

MoldRANGE™: Extended Outdoor Comparison
Outdoor Location: 21109001-12 TM01OUT

Fungi Identified	Outdoor data	Typical Outdoor Data for †						Typical Outdoor Data for †					
		October in California (n‡=13248)						The entire year in California (n‡=158505)					
	spores/m3	very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
Generally able to grow indoors*													
Alternaria	27	13	13	27	73	120	61	13	13	27	67	100	56
Bipolaris/Drechslera group	-	7	13	13	27	53	18	7	13	13	27	40	13
Chaetomium	13	8	13	13	33	53	24	8	13	13	27	44	19
Cladosporium	2,000	160	360	1,100	3,100	5,500	98	110	210	640	1,700	2,800	97
Curvularia	13	7	13	13	40	76	14	7	13	13	27	53	6
Nigrospora	13	10	13	13	40	80	20	7	13	13	27	53	8
Penicillium/Aspergillus types	-	53	110	320	910	1,600	91	53	110	210	600	1,000	86
Stachybotrys	-	7	13	13	38	67	5	7	13	13	33	67	5
Torula	80	8	13	13	40	67	12	8	13	13	40	67	12
Seldom found growing indoors**													
Ascospores	-	20	44	110	320	650	71	22	53	110	330	670	72
Basidiospores	270	53	100	270	1,000	2,500	94	53	80	270	1,000	2,400	94
Rusts	13	11	13	13	40	80	26	13	13	13	50	80	27
Smuts, Periconia, Myxomycetes	80	13	13	53	130	230	76	13	13	40	110	190	69
§ TOTAL SPORES/m3	2,500												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 20% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

‡n = number of samples used to calculate data.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.



Report for:

Mr. Wesley Frey, Mr. Larry Sandhu
Hygiene Technologies International, Inc.: Northern California
3625 Del Amo Boulevard, Suite 180
Torrance, CA 90503-8370

Regarding: Project: 21109001 -12 & 13
EML ID: 837731

Approved by:

Lab Manager
Malcolm Moody

REVISED REPORT

Dates of Analysis:
Spore trap analysis: 12-07-2011

Service SOPs: Spore trap analysis (1038)

For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Document Number: 200091 - Revision Number: 5

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wesley Frey, Mr. Larry Sandhu
Re: 21109001 -12 & 13

Date of Sampling: 10-01-2011
Date of Receipt: 10-01-2011
Date of Report: 10-01-2011

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	21109001-12 TM01OUT		21109001-12 TM02	
Comments (see below)	None		None	
Lab ID-Version†:	3718682-2		3718683-2	
	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	2	27		
Ascospores*				
Basidiospores*	5	270		
Bipolaris/Drechslera group				
Botrytis				
Chaetomium	1	13		
Cladosporium	38	2,000	1	53
Curvularia	1	13		
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora	1	13		
Other colorless				
Penicillium/Aspergillus types†				
Pithomyces				
Rusts*	1	13		
Smuts*, Periconia, Myxomycetes*	6	80	1	13
Stachybotrys				
Stemphylium				
Torula	6	80		
Ulocladium				
Zygomycetes				
Background debris (1-4+)††	2+		2+	
Hyphal fragments/m3	80		13	
Pollen/m3	93		< 13	
Skin cells (1-4+)	1+		1+	
Sample volume (liters)	75		75	
§ TOTAL SPORES/m3		2,500		67

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.

* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for sample volumes when evaluating dust levels.

The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.



EMLab P&K

Report for:

Mr. Wesley Frey, Mr. Larry Sandhu
Hygiene Technologies International, Inc.: Northern California
3625 Del Amo Boulevard, Suite 180
Torrance, CA 90503-8370

Regarding: Project: 21109001 -12 & 13
EML ID: 837731

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:

Direct microscopic exam (Qualitative): 10-01-2011

Service SOPs: Direct microscopic exam (Qualitative) (I100005)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Document Number: 200091 - Revision Number: 5

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wesley Frey, Mr. Larry Sandhu
Re: 21109001 -12 & 13

Date of Sampling: 10-01-2011
Date of Receipt: 10-01-2011
Date of Report: 10-01-2011

DIRECT MICROSCOPIC EXAMINATION REPORT

(Wet Mount)

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 3718680-1: Tape sample 21109001-13 TL01				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 3718681-1: Tape sample 21109001-13 TL02				
Light	Very few	None	None	Normal trapping

* Indicative of normal conditions, i.e. seen on surfaces everywhere. Includes basidiospores (mushroom spores), myxomycetes, plant pathogens such as ascospores, rusts and smuts, and a mix of saprophytic genera with no particular spore type predominating. Distribution of spore types seen mirrors that usually seen outdoors.

† Quantities of molds seen growing are listed in the MOLD GROWTH column and are graded 1+ to 4+, with 4+ denoting the highest numbers.

†† Some comments may refer to the following: Most surfaces collect a mix of spores which are normally present in the outdoor environment. At times it is possible to note a skewing of the distribution of spore types, and also to note "marker" genera which may indicate indoor mold growth. Marker genera are those spore types which are present normally in very small numbers, but which multiply indoors when conditions are favorable for growth.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".



Report for:

Mr. Wesley Frey, Mr. Larry Sandhu
Hygiene Technologies International, Inc.: Northern California
3625 Del Amo Boulevard, Suite 180
Torrance, CA 90503-8370

Regarding: Project: 21109001 -12 & 13
EML ID: 837731

Approved by:

Lab Manager
Malcolm Moody

REVISED REPORT

Dates of Analysis:
Spore trap analysis: 12-07-2011

Service SOPs: Spore trap analysis (1038)

For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Document Number: 200091 - Revision Number: 5

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wesley Frey, Mr. Larry Sandhu
Re: 21109001 -12 & 13

Date of Sampling: 10-01-2011
Date of Receipt: 10-01-2011
Date of Report: 12-07-2011

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	21109001-12 TM01OUT		21109001-12 TM02	
Comments (see below)	None		None	
Lab ID-Version†:	3718682-2		3718683-2	
	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	2	27		
Ascospores*				
Basidiospores*	5	270		
Bipolaris/Drechslera group				
Botrytis				
Chaetomium	1	13		
Cladosporium	38	2,000	1	53
Curvularia	1	13		
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora	1	13		
Other colorless				
Penicillium/Aspergillus types†				
Pithomyces				
Rusts*	1	13		
Smuts*, Periconia, Myxomycetes*	6	80	1	13
Stachybotrys				
Stemphylium				
Torula	6	80		
Ulocladium				
Zygomycetes				
Background debris (1-4+)††	2+		2+	
Hyphal fragments/m3	80		13	
Pollen/m3	93		< 13	
Skin cells (1-4+)	1+		1+	
Sample volume (liters)	75		75	
§ TOTAL SPORES/m3		2,500		67

Comments:

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